having a stator and a rotor, wherein the stator is fixed to a reference frame, a threaded shaft coupled to the rotor, a torsion spring disposed perpendicular to the axis of the threaded shaft, the torsion spring comprising a center portion coaxially attached to the threaded shaft and an outer portion attached to the reference frame, and a translation actuator threadedly coupled to the threaded shaft, the actuator rotationally stopped and operable to laterally translate in response to rotation of the threaded shaft by the DC motor.

The Examiner states that *Schneider* teaches the first element of Claim 1 which is a DC motor having a stator and rotor, wherein the stator is fixed to a reference frame and cites that *Schneider* teaches a "direct current (DC) motor (92) having a stator and a rotor, said rotor fixed to a reference frame." Motor 92 is shown in FIG. 1 of *Schneider*. The Examiner then states that *Schneider* teaches "a threaded shaft (170) coupled to the rotor and coaxially coupled to a rotational shaft stop, the shaft stop having a first and second shaft stop surface." The Examiner states that the threaded shaft 170 is likewise shown in FIG. 1 and coupled to motor 92. However, FIG. 1 of *Schneider* does not teach that the threaded shaft is "coaxially coupled to a rotational shaft stop, said shaft stop having a first and second shaft stop surface" as stated in Claim 1 of the present invention. In FIG. 1 of *Schneider*, threaded shaft 170 is coupled to another motor 90. *Schneider*, column 6, lines 56-66. In *Schneider,* Motor 92 acts as a linear actuator and has threaded shaft 170. Shaft 170 is coupled to motor 90 and is not coupled to a rotational shaft stop with first and second shaft stop surfaces as stated clearly in Claim 1 of the present invention. Nowhere in *Schneider* does motor 92 with threaded shaft 170 couple to a rotational shaft stop.

The third element of Claim 1 is a torsion spring disposed perpendicular to the axis of the thread shaft and has a center portion coupled to the threaded shaft and an outer portion coupled to the reference frame. The Examiner states that *Schneider* teaches the

torsion spring of Claim 1 and cites torsion springs 330 and 332, which are found in FIG 13. In FIG 13, *Schneider* is describing a spring that is coupled to motor 90. First, neither torsion spring 330 or 332 is coupled to the threaded shaft as recited in Claim 1. Secondly, neither torsion spring 330 or 332 has an outer portion coupled to the reference frame to which motor 92 is attached. While a motor and a torsion spring are found in *Schneider*, they are not coupled and they do not form the same structure as recited in Claim 1 of the present invention. In *Schneider*, Motor 90 and its corresponding torsion springs 330 and 332 form an oscillatory motor that move transducer 16 back and forth in a plane substantially tangential to threaded shaft 170. Linear motor 92 moves the oscillatory motor comprising motor 90. *Schneider*, column 9, lines 51-54. Motor 90 is coupled to torsion springs 330 and 332 and does not form a linear actuator as is recited in Claim 1. Likewise, motor 92 and threaded shaft 170 form a linear motor but do not comprise torsion springs or a rotational shaft stop coupled to the threaded shaft as recited in Claim 1.

The fourth element of Claim 1 is a translation actuator threadedly coupled to the threaded shaft, wherein the translation actuator is rotationally stopped and translates laterally in response to rotation of the threaded shaft. In *Schneider*, the oscillatory motor formed by motor 90 and torsion springs 330 and 332 is moved by a second motor, linear motor 92. The oscillatory motor formed by motor 90 and torsion springs 330 and 332 are coupled to transducer 16 and are not a "translation actuator" as recited by Claim 1. The oscillatory motor does not actuate anything and is in fact immersed in a fluid 30. Fluid 30 is formulated to transmit ultrasonic energy of transducer 16 coupled to the oscillatory motor. *Schneider*, column 5, lines 30-59.

The elements in Claim 1 of the present invention cannot be looked at in isolation. In the M.P.E.P. § 2131 it states, "to anticipate a claim, the reference must teach every element of the claim." The M.P.E.P. further states, "a claim is anticipated only if each

and every element as set forth in the claim is found, either expressly or inherently described in a single prior reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631; 2 U.S.P.Q.2d 1051, 1053 (Fed. Cir. 1987). The identical invention must be shown in as complete a detail as is contained in the claim. *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236; 9 U.S.P.Q.2d 1913, 1920 (Fed. Cir. 1989). Therefore the Applicants respectfully assert that the rejection of Claim 1 under *35 U.S.C. § 102(e)* as being anticipated by *Schneider* is traversed for the reasons stated above.

The Examiner fails to address Claim 2, which is a dependent claim to Claim 1 further defining the torsion spring. Therefore, the Applicants respectfully assert that the Examiner fails to make the *prima facie* case of anticipation as required in *37 § 1.104 section C(2)*.

The Examiner fails to address Claim 3, which is a dependent claim to Claim 1 further defining the translation actuator. Therefore, the Applicants respectfully assert that the Examiner fails to make the *prima facie* case of anticipation as required in *37 § 1.104 section C(2)*.

The Examiner fails to address Claim 4, which is a dependent claim to Claim 1 further limiting the threaded shaft to having a rotational shaft stop with first and second shaft stop surfaces. Therefore, the Applicants respectfully assert that the Examiner fails to make the *prima facie* case of anticipation as required in *37 § 1.104 section C(2)*.

The Examiner fails to address Claim 5, which is a dependent claim to Claim 4 further limiting the linear actuator to having a first and a second actuator stop. Therefore, the Applicants respectfully assert that the Examiner fails to make the *prima facie* case of anticipation as required in *37 § 1.104 section C(2)*.

The Examiner fails to address Claim 6, which is a dependent claim to Claim 5 further limiting the drive voltage applied to the DC motor. Therefore, the Applicants

respectfully assert that the Examiner fails to make the *prima facie* case of anticipation as required in *37 § 1.104 section C(2).*

The Examiner fails to address independent Claim 7 reciting a linear translating actuator. Therefore, the Applicants respectfully assert that the Examiner fails to make the *prima facie* case of anticipation as required in *37 § 1.104 section C(2).* Therefore, the Applicants assert that the rejection of Claim 7 under *35 U.S.C. § 102(e)* as being anticipated by *Schneider* is traversed.

The Examiner fails to address Claim 8, which is a dependent claim to Claim 7 limiting the actuator as having an end portion to contact a mechanical load. Therefore, the Applicants respectfully assert that the Examiner fails to make the *prima facie* case of anticipation as required in *37 § 1.104 section C(2).* Therefore, the Applicants assert that the rejection of Claim 8 under *35 U.S.C. § 102(e)* as being anticipated by *Schneider* is traversed.

The Examiner fails to address Claim 9, which is a dependent claim to Claim 7 limiting the shaft to having rotational shaft stop with first and second shaft stop surfaces. Therefore, the Applicants respectfully assert that the Examiner fails to make the *prima facie* case of anticipation as required in *37 § 1.104 section C(2).* Therefore, the Applicants assert that the rejection of Claim 9 under *35 U.S.C. § 102(e)* as being anticipated by *Schneider* is traversed.

The Examiner fails to address Claim 10, which is a dependent claim to Claim 9 limiting the linear actuator to having a first and a second actuator stop. Therefore, the Applicants respectfully assert that the Examiner fails to make the *prima facie* case of anticipation as required in *37 § 1.104 section C(2).* Therefore, the Applicants assert that the rejection of Claim 10 under *35 U.S.C. § 102(e)* as being anticipated by *Schneider* is traversed.

The Examiner fails to address Claim 11, which is a dependent claim to Claim 10 further limiting the drive voltage applied to the DC motor. Therefore, the Applicants respectfully assert that the Examiner fails to make the *prima facie* case of anticipation as required in *37 § 1.104 section C(2)*. Therefore, the Applicants assert that the rejection of Claim 11 under *35 U.S.C. § 102(e)* as being anticipated by *Schneider* is traversed.

The Examiner fails to address Claim 12, which is a dependent claim to Claim 10 further limiting the energy storage means. Therefore, the Applicants respectfully assert that the Examiner fails to make the *prima facie* case of anticipation as required in *37 § 1.104 section C(2)*. Therefore, the Applicants assert that the rejection of Claim 12 under *35 U.S.C. § 102(e)* as being anticipated by *Schneider* is traversed.

The Examiner fails to address Claim 15, which is a dependent claim to Claim 7 further limiting the conversion means to a threaded screw member. Therefore, the Applicants respectfully assert that the Examiner fails to make the *prima facie* case of anticipation as required in *37 § 1.104 section C(2)*. Therefore, the Applicants assert that the rejection of Claim 15 under *35 U.S.C. § 102(e)* as being anticipated by *Schneider* is traversed.

II. REJECTION UNDER *35 U.S.C. § 103*

Claims 13-14 are rejected under *35 U.S.C. § 103(a)* as obvious over U.S. Patent No. 5,935,071 to *Schneider et al.* (hereafter *Schneider*) in view of U.S. Patent No. 5,777,404 to *Has* (hereafter *Has*).

Claim 13 is a dependent claim to independent Claim 7. The Examiner failed to address independent Claim 7 and thus cannot separately address dependent Claim 13, which contains all the limitations of the independent Claim 7. Claim 7 recites a linear translating actuator comprising an energy storing means for storing rotational energy from the DC motor. Claim 13 limits the energy storing means to an elastic strip fixed to

the shaft and to the frame, wherein the elastic strip wraps on the shaft and stretches to store energy. The Examiner states that *Schneider* does not teach the elastic strip or a linear spring recited in Claim 13. The Applicants respectfully assert that nowhere in Claim 13 is a linear spring recited and is confused to why the Examiner makes this admission about *Schneider* concerning a linear spring which is not recited in Claim 13 of the present invention. The Examiner then states that *Has* does teach "the construction of a rotating actuator having an elastic strip (10) and a linear spring (1) for the purpose of setting the flywheel (2) and actuating element (3) into movement through a defined free angle (20). The element that the Examiner identifies as "elastic strip 10" in *Has* is actually a locking device 10. *Has*, column 9, lines 35-37. The present invention recites a linear translating actuator comprising a DC motor. *Has* is teaching away from a DC motor and states that an object of the invention is an actuator that operates without external energy sources which are required for a DC motor as recited in Claim 7. *Has* column 1, lines 24-34. Nowhere does *Has* or *Schneider* teach or suggest the use of an elastic strip as recited in Claim 13.

The Applicants respectfully assert that the Examiner fails to make the *prima facie* case of obviousness as required in *37 § 1.104 section C(2)*. Therefore, the Applicants assert that the rejection of Claim 13 under *35 U.S.C. § 103(a)* as being obvious over *Schneider* in view of *Has* is traversed.

Claim 14 is a dependent claim to independent Claim 7. The Examiner failed to address independent Claim 7 and thus cannot separately address dependent Claim 14, which contains all the limitations of the independent Claim 7. Therefore, the Applicants respectfully assert that the Examiner fails to make the *prima facie* case of obviousness as required in *37 § 1.104 section C(2)*. Therefore, the Applicants assert that the rejection of Claim 13 under *35 U.S.C. § 103(a)* as being obvious over *Schneider* in view of *Has* is traversed.

III. CONCLUSION

The Applicants have traversed the rejections to Claims 1-12 and Claim 15 under *35 U.S.C. § 102(e)* as being anticipated by *Schneider*. The Applicants have also traversed the rejections to Claims 13-14 and Claim 15 under *35 U.S.C. § 103(a)* as being obvious over *Schneider* in view of *Has*. Therefore, the Applicants assert that Claims 1-15 are in condition for allowance and requests and early allowance of these claims.

Applicants respectfully request that the Examiner call Applicants' attorney at the below listed number if the Examiner believes that such a discussion would be helpful in resolving any remaining problems.

Respectfully submitted,

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